

I claim:

1. A controller for high speed communications between a host computer and at least one peripheral device, comprising:
 - a processor for controlling communications on a bus using one or more communication functions, wherein said processor performs at least one function for said peripheral device in addition to said one or more communication functions.
- 10 2. The controller of claim 1, wherein said processor is integrated with said controller.
- 15 3. The controller of claim 1, wherein said processor provides processing capacity for use by said peripheral device in addition to processing of said one or more communication functions.
4. The controller of claim 1, wherein said at least one peripheral device employs said processor to perform each of said functions of said at least one peripheral device.
- 20 5. The controller of claim 1, wherein said high speed communications conform to a USB standard.
6. The controller of claim 1, wherein said high speed communications conform to an IEEE 1394 standard.
- 25 7. The controller of claim 1, wherein said high speed communications conform to an IEEE 802.11 standard.

8. A method for controlling communications between a host computer and at least one peripheral device, comprising the step of:

executing one or more communication functions that control communications on a bus using a first processor, wherein said first processor also performs at least one function for said peripheral device in addition to said one or more communication functions.

9. The method of claim 8, wherein said first processor provides processing capacity for use by said peripheral device in addition to processing of said one or more communication functions.

10. The method of claim 8, wherein said at least one peripheral device employs said first processor to perform each of said functions of said at least one peripheral device.

11. The method of claim 8, wherein said high speed communications conform to a USB standard.

12. The method of claim 8, wherein said high speed communications conform to an IEEE 1394 standard.

20 13. The method of claim 8, wherein said high speed communications conform to an IEEE 802.11 standard.

14. An integrated circuit, comprising:
a controller for high speed communications between a host computer and at least
25 one peripheral device, comprising:
a processor for controlling communications on a bus using one or more communication functions, wherein said processor performs at least one function for said peripheral device in addition to said one or more communication functions.

15. The integrated circuit of claim 14, wherein said processor is integrated with said controller.

16. The integrated circuit of claim 14, wherein said processor provides processing 5 capacity for use by said peripheral device in addition to processing of said one or more communication functions.

17. The integrated circuit of claim 14, wherein said at least one peripheral device employs said processor to perform each of said functions of said at least one peripheral device.

10 18. The integrated circuit of claim 14, wherein said high speed communications conform to a USB standard.

15 19. The integrated circuit of claim 14, wherein said high speed communications conform to an IEEE 1394 standard.

20. The integrated circuit of claim 14, wherein said high speed communications conform to an IEEE 802.11 standard.

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